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**Parys et al.**

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(54) **UTERINE MANIPULATORS AND RELATED COMPONENTS AND METHODS**

(56) **References Cited**

U.S. PATENT DOCUMENTS

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1,856,295 A	5/1932	Sovatkin
2,186,143 A	1/1940	Neugass
2,456,806 A	12/1948	Wolffe
2,744,708 A	5/1956	Bedford, Jr.
3,096,764 A	7/1963	Hiebert
(Continued)		

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FOREIGN PATENT DOCUMENTS

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 229 days.

DE	201 10 921	12/2001	.....	A61B 17/42
DE	695 32 474	11/2004	.....	A61B 17/42
(Continued)				

OTHER PUBLICATIONS

Culligan et al., "Long-Term Success of Abdominal Sacral Colpopexy Using Synthetic Mesh," Am. J. Obstet. Gynecol., Dec. 2002.

(Continued)

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(52) **U.S. Cl.**

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(58) **Field of Classification Search**

CPC ..... **A61B 17/42–17/48**; **A61B 1/32**  
See application file for complete search history.

(57) **ABSTRACT**

A uterine manipulator includes a shaft configured to be inserted into a cervix and a colpotomizer assembly configured to move along the shaft. The shaft includes multiple ruler markings printed along a portion of the shaft. The colpotomizer assembly includes a sleeve that includes a rotatable locking member configured to compress the shaft in a manner that locks the colpotomizer assembly in position along the shaft when the rotatable locking member is depressed against the shaft. The rotatable locking member includes a cam roller configured to compress the shaft when the rotatable locking member is depressed towards the shaft.

**21 Claims, 11 Drawing Sheets**

